DOCUMENT RESUME

ED 145 502 EA 009 922

AUTHOR Sharma, C. L.
TITLE Evolution of Management Thought in the Ancient Times.
PUB DATE [77]
NOTE 37p.; Best copy available

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Administrative Organization; Administrative Principles; *Ancient History; *Historical Reviews; *Management

ABSTRACT

This paper argues that although systematic management thought is a distinctly modern development, the writings of ancient scholars and records of ancient rulers infer that they understood the rudiments of management principles and concepts. To support this thesis, the author reviews the evidence of management practices and concepts in various ancient civilizations, including the Sumerian, Egyptian, Babylonian, Hebrew, ancient Chinese, ancient Indian, Greek, and Roman. (JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED145502

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

EVOLUTION OF MANAGEMENT THOUGHT IN THE ANCIENT TIMES

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C.L. Sharma

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

C. L. Sharma

The University of North Carolina
at Greensboro

Greensboro, North Carolina

BEST COPY AVAILABLE

EA 009 922

EVOLUTION OF MANAGEMENT THOUGHT IN THE ANCIENT TIMES

Management is a nebulous, amorphous, and ubiquitous phenomenon present in all societies and permeates all of their institutions. No society can carry on its functions without it. It is an ancient activity and has been practiced through the ages. In contrast, the management thought -- in the sense of deliberate attempts at theorizing about management principles and concepts -- is distinctly a development of the recent times and can scarcely be traced prior to the middle of the nineteenth century. Hence the practice of management antedates the theory of management by centuries. Nonetheless, from the writings of the ancient scholars and from the records of the ancient leaders, it may be inferred that probably they possessed some understanding of the rudiments of the management principles and concepts.

Being guided by his gregarious instinct and impelled by his need for self-protection, man learned to associate and cooperate with fellow beings at an early stage of human existence. He formed groups for self-preservation as well as for accomplishing through collective efforts what he individually could not. Consequently, organization, whether formal or informal, has been a universal phenomenon associated with human existence, and management, whether explicit or implicit, has been an indispensable instrument to make it functi[illegible]. Organization as a form of human association seeks the attainment of common

purposes, and management is the mechanism that facilitates that attainment.

Individuals by themselves are relatively weak. However, they acquire strength when they agree to cooperate informally, and their strength is considerably augmented when they organize themselves formally. The strength of a formal organization depends upon its size, which in turn determines the complexity of the management machinery needed for its functioning. Both formal organization and management are prerequisites for effective utilization of human and physical resources, attainment of societal goals, and advancement of civilization.

The process of social change invariably reflects itself in the nature of the organization and in the mechanism for its management. The basic concepts of management in their rudimentary state are clearly discernible even in the primitive stage of human existence. Man was the head of the family, and as a superordinate he intuitively engaged in the functions of planning, organizing, directing, coordinating, and controlling. The superordinate-subordinate relationship helped him in the performance of these functions which were essential for the management of the affairs of the family.

With the advent of pastoral and agricultural stages, the family, heretofore virtually an isolated independent unit of habitation, gradually lost its importance, and clans and tribes emerged as the dominant social institutions. The loyalty of the individual members

transcended the family circle, and the clans and tribes assumed responsibility for their protection and welfare. Family became a subordinate unit of the clans and tribes and lost its supremacy over its members. This transformation of the social structure led to a greater division of labor, a further elongation of hierarchy, and a formalization of the roles of the various clan and tribal leaders. The organizational structure became more readily visible, and formally designated managers made their first appearance.

Later, with the establishment of settlements and the development of city states and empires, more differentiated types of organizations came into existence, each with its own set of specialized personnel. Subsequent stages of human history witnessed the emergence of progressively larger organizations, with a greater number of personnel, more complex hierarchies, and more refined and intricate management techniques. About the middle of the eighteenth century, the "Protestant Ethic" to a great extent contributed to the development of the large-scale economic enterprises. The so-called "Industrial Revolution" which in the Western World initiated the transformation of the handicraft system into [illegible] factory system quickly spread to other segments of the economy with its correlates of more organizing, more complex organizations, more bureaucracy, and more management personnel.

Prehistoric Period

During the Mesolithic culture, about 9,000 B. C., man made his living primarily by hunting, fishing, and collecting fruits, and nuts.[1] Consequently, the family was constantly on the move in search of food. The man invariably acted as the head of the family and directed all food-gathering operations, presumably because of his experience and expertise. Perhaps, the gregarious instinct and the need for mutual protection impelled the families to band together to form clans and tribes. With the formation of clans and tribes and the concomitant problems of communal living, the need for management became more conspicuous and the task of management more complex.

Gradually, the Mesolithic culture vanished and was replaced by other cultures. In due course, man learned to domesticate animals and became a nomad. Later, he acquired skills in agriculture which eventually led to fixed settlements. These successive changes in the state of the primitive society were accompanied by new problems which required new techniques of management. Consequently, over the period numerous formally designated tribal leaders with specialized responsibilities and functions emerged. There are no records available to illuminate the manner in which the primitive societies precisely managed their affairs, but it seems reasonable to conjecture that they could not have done so without using, albeit unwittingly, a modicum of management techniques.

The Ancient Civilizations

With the advance of civilization, the affairs of the societies became increasingly complex, and new management techniques had to be developed to handle them. Many ancient rulers appointed wise men as their counselors. The counselors collectively acted as a council or an advisory body to the ruler and performed what is today known as the staff function. Initially, the rulers established themselves through force, but gradually they also won recognition as spiritual leaders. They maintained themselves in power by virtue of the belief in their divineness, through fear of the supernatural, and through display of the physical force.

Sumerian Civilization:

The earliest evidence of the management process of control may be gleaned from the documents believed to have been written during the Sumerian civilization. The Sumerian priests managed vast amounts of temple wealth. These priests were required to maintain accurate and complete records of their transactions and to submit them to the chief priest regularly. The purpose of this practice was to obviate the possibility of mismanagement of funds in the event of the death of a priest. In order to give permanency to their records and to facilitate continuity of management, the Sumerian priests developed a system of writing.[2] Thus the Sumerians are among the earliest people known to have recognized the need for the management process of

control and to have developed a system to implement it successfully.

Egyptian Civilization:

The ancient Egyptian civilization flourished in the valley of the river Nile. Its achievements in the field of management can be inferred from the buildings erected, the organization of the government, and the writings of the period.

Buildings: The construction of impressive pyramids in Egypt during the period 5,000 to 525 B. C. could not have been undertaken without the employment of management skills of the highest order. In many instances, the construction extended over decades and engaged more than a hundred thousand workers. Long expeditions for quarrying stones, their transportation over vast distances to the building sites, provisions for workers and animals on a massive scale, and prolonged ceaseless supervision of operations on the gigantic projects offer indisputable evidences of the management skills possessed by the ancient Egyptians.[3]

Government: A study of the Egyptian government during the Old Kingdom, the Middle Kingdom, and the New Empire reveals an increasing emphasis on centralization. From 2160 to 1788 B. C. the central government exercised little control over the constituent states. The heads of these states had complete autonomy except that they owed allegiance to the Pharaoh and contributed taxes to the coffers of the central government. This proved to be an inefficient system of government, but continued until about 1600 B. C. when the rulers

of the New Empire period started imposing a tighter control over the states through military action.[4] As a consequence, all authority came to be vested in the Pharaoh, and he ruled the country through governors and mayors appointed by and accountable to him. Gradually, there emerged an elaborate bureaucratic structure to manage the functions of the government. The central government maintained a powerful army to ensure law and order and to collect taxes.

The process of centralization continued during the period of the New Empire, 1530-1050 B. C.; the autonomous state governments of the earlier period completely disappeared; and Pharaoh Hyksos became the owner of all property in Egypt.[5] During this period, the Egyptians developed skills in keeping detailed records of government and business transactions, and scribing emerged as a new profession.[6] The Egyptians also passed certain laws which were apparently designed to promote specialization in trades, e.g., no one could pursue any trade except that of his parents; and the tradesmen were forbidden to participate in political affairs in order to conserve their time and energy to improve their trades.[7]

Writings: Allusions to management thought may be gleaned from the writings of ancient Egypt. One of the earliest works replete with instructions, which may be construed as management advice, is the book by Ptah-hotep addressed to his son. A vizier of King Issi about 2700 B. C. is given credit for its writing. It is believed to have been revised in 2000 B. C. and it is presumed to have been

used in schools until about 1500 B. C.[8]

The early Egyptian writings enjoined the rulers to rid the country of corrupt practices and to give a patient hearing to the complaints of the people.[9] The need for personal integrity, advance planning, and staff functions has also been emphasized.[10] References also abound to such sound management precepts as impartiality in dealing with people, maintaining mental composure, keeping an accurate account of income and expenditure, reporting to superordinates on a regular basis, seeking counsel of knowledgeable people, accountability, submitting complaints in writing, holding periodical meetings with subordinates, taking advice from superordinates, and supervising every craft in order to improve the skills of the artisans.[11] The relevance of these precepts to the management of modern organizations is readily apparent.

Babylonian Civilization

The Babylonian civilization flourished in the valley of the rivers Tigris and Euphrates during the period 2800 to 1000 B. C. It reached the pinnacle of its glory during the reign of King Hammurabi some time between 2000 and 1700 B. C. During his period 285 laws were enacted to regulate the trade and business. These laws constitute Hammurabi's code and are evidence of the impressive advancement of the civilization at that time. Prior to the code of Hammurabi, the Babylonians governed themselves by the Akkadian code of Eshnunna.[12] These two codes contain laws dealing with wages, price controls,

criminal penalties, deposits, contracts, accounting procedures, and numerous other aspects of management.[13] Hammurabi, through his benevolent rule, set an example of his effective leadership style. Records of this period reveal firm establishment of the management principle that responsibilty can not be delegated.[14]

During the rule of King Nebuchadnezzar who acceded to the throne in 604 B. C., further advances in management techniques were made. A color scheme was devised to facilitate the production and inventory control in textile mills and granaries, and a piece-rate wage system was instituted to motivate the workers. Also, the erection of magnificent structures during his reign would not have been possible without the utilization of the basic processes of management -- planning, organizing, staffing, directing, coordinating, and controlling.[15]

The Hebrews:

The ancient Hebrew writings reveal that the early Hebrew leaders possessed a good grasp of the management principles. Some of the practices recorded in the Bible may be considered as the precursors of modern management techniques. In the Old Testament, Jethro, father-in-law of Moses, advises him on staffing and division of authority in organization as follows:

> Moreover, thou shalt provide out of all the people able men, such as fear God, men of truth, hating covetousness; and place such over them, to be rulers of thousands, and rulers of hundreds, rulers of fifties, and rulers of tens. If thou shalt do this thing, and God command thee so, then thou shalt be able to endure... .[16]

Moses accepted this advice and took the following action:

> And Moses chose able men out of all Israel and made them heads over the people, rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens. And they judged the people at all seasons: the hard causes they brought unto Moses, but every small matter they judged themselves.[17]

In the above excerpts, the management concepts of division of labor, hierarchy of organization, selection of personnel, delegation of authority, and the exception principle are readily evident. Moses successfully used them in executing the exodus of the Hebrews from the bondage of the Egyptians.

Importance of wisdom in rulers has been universally recognized. Solomon said: "Wisdom is more precious than rubies," and by wisdom "Princes rule and nobles, even all the judges of the earth... ."[18] But he also cautioned against being conceited: "Be not righteous overmuch; neither make thyself overwise."[19] Ancient Hebrew scriptures have always recommended the use of advisors by the ruler: "Where no counsel is, the people fall; but in the multitude of counsellors there is safety."[20] Thus according to ancient Hebrew writings, a ruler should be wise but not conceited; he should have an attitude of compromise; he should be flexible and not intractable; and he should surround himself by wise counselors.

The Ten Commandments of the Bible may be construed as rules of conduct to foster group solidarity and group cohesiveness so important for the effective functioning of an organization. A novel

example of long-range planning is implicit in the conduct of Joseph when he engaged himself in storing grain in anticipation of "seven lean years".[21] In the absence of any scientific knowledge of forecasting available at that time, it is difficult to conceive how this remarkable planning feat was accomplished. It can only be surmised that probably intuition and experience played too important a role in the management of the affairs of the ancient societies. Despite the undeniable exaggeration of achievements, the possibility of some understanding of the management concepts and their application on the part of our remote ancestors can not be discounted.

Ancient China:

The legendary Emperor Yao is said to have reigned from about 2,350 to 2,256 B. C. He is credited for making extensive use of his advisory staff in the decision-making process. Emperor Shun, who succeeded Yao, likewise sought to benefit from extensive consultations with his able counselors. Later, T'ang (1766-1754 B. C.), who is considered to be the founder of the Shang dynasty, continued the policy of vigorous and sustained consultations with his advisers.[22] The early rulers of China found the practice of having advisory staff so beneficial that it became a firmly established tradition of the succeeding governments of China.[23]

The early Chinese records contain references to management concepts. The constitution of Chow, presumed to have been written about 1,100 B. C., is in essence a directory of all civil servants

in the empire with a description of their duties. From the description of the duties of the various functionaries, it may be conjectured that probably the ancient Chinese had some insight into the techniques of management.[24]

About 500 B. C., Sun Tzu wrote the military treatise, The Art of War, in which he discussed strategies, tactics, and maneuvering on the battleground. He emphasized the need of advance planning and clear directions for the success of military operations. He pointed out that for an effective and efficient military organization, the duties of all officers and men should be precisely defined, the officers should have the requisite authority, and their orders should be unequivocal and definitive.[25]

The ancient Chinese scholars emphasized the importance of specialization in the various trades and sought to promote it by making them hereditary. The members of the various trades were assigned separate residential quarters so that they could improve their skills by frequent association with one another.[26]

Confucius (551-479 B. C.) stressed the importance of administration by men of wisdom. To him, wisdom emanated from literary scholarship. He pointed out that in order to command the confidence of his subordinates, the administrator must be a good person as well as diligent and persevering. He should avoid extreme forms of action and follow the golden mean.[27] Mocius (470-390 B. C.), one of his disciples, complemented his thinking by recognizing the value of

systems and procedures developed by specialists for the management of organizations.[28]

Out of fear of the machinations of the wise men, Lao Tse, on the other hand, advised: "Banish wisdom, discard knowledge, and the people shall profit a hundredfold... . Exalt not the wise, so that people shall not scheme and contend... . In managing human affairs, there is no better rule than to be sparing -- that is, never do too much."[29]

In giving advice to rulers, some ancient Chinese writers have advocated that ends justify the means and have encouraged them to be unscrupulous in the preservation of law and order. Han Fei Tsu recommends that in the management of the state, the ruler must maintain strict discipline over the people at all times. Without discipline, people tend to misbehave and become corrupt.[30]

The early Chinese writings offer some evidence about the training and selection of personnel. Liu Shao, a retired Chinese official, made the first serious attempt about 250 A. D. to differentiate among the various types of people according to their abilities. In his book, The Study of Human Abilities, he points out that to judge people for their abilities is the most difficult task, and yet this is exactly what needs to be done continuously to recruit personnel for an organization.[31]

Prime Minister Kung-Sun is given credit for having started the civil service examinations about 120 B. C. to select personnel for

the government. These were competitive examinations, and the candidates who scored high were selected for the positions.[32] The purpose of these examinations was not to test any special skills. Instead, they sought to ascertain "whether or not the candidate's mind was thoroughly steeped in literature and whether or not he possessed the way of thought suitable to a cultured man and resulting from cultivation in literature... . All the grades were intended as tests in penmanship, style, mastery of classic writings, and finally ... in conformity with the prescribed mental outlook."[33]

The Confucian approach to education aimed at preparing students to pass the competitive examinations and as a result produced a core of scholars, officials, and statesmen who carried on the functions of the government smoothly. The Confucian scholars controlled the Chinese system of civil service examinations and undoutedly used it for their personal advancement.[34]

Ancient India

An outstanding work on the science of polity with a significant contribution to management thought is the Arthasastra written by Kautilya during the period 321-296 B. C. He was a great scholar and an astute minister who helped overthrow the Nanda dynasty and establish the Maurya empire in India during the fourth century B. C. The Arthasastra is a comprehensive treatise on the management of the political, social, and economic aspects of the state. It contains general principles as well as detailed techniques for the management

of both internal and external affairs of the state and offers an incisive insight into statecraft.[35]

Kautilya served as an adviser to Emperor Chandragupta Maurya. He was sagacious, circumspect, and perceptive. He considered the preservation of the state as of supreme importance, and to this end he sanctioned the use of espionage and allurements. To protect the state from external enemies, he recommended forging of alliances with the countries that surrounded the enemy states. This strategy would result in the formation of concentric circles of enemy states being surrounded by friendly states which in turn would be surrounded by enemy states and then by friendly states. According to him, foreign policy consisted of continual adjustment of the relations with the various states in the concentric circles with the sole purpose of maintaining an effective deterrent force at all times. He believed that power alone secured and preserved peace and that right proceeded from might.[36]

Referring to the management of internal affairs, Kautilya pointed out that it was difficult to find men of unquestionable integrity and unimpeachable character to serve the state. They often succumbed to temptations, were apt to be disloyal, were prone to steal public property, and their misdeeds could not be easily detected. In order to combat this problem, he devised an elaborate control system for public servants. It involved prior determination of the precise nature, place, time, procedure, and cost of all work, and daily

evaluation of the progress. It prescribed severe fines and punishments for errors and negligence. It included a well-designed scheme of spying and enticements to test the character of public servants.[37]

The great Indian epic poem, the Mahabharata, probably recorded in its present form between the third and fourth centuries A. D., offers valuable suggestions for the effective management of the state. It enjoins the ruler to be wise, just, bold, and righteous, and directs him to preserve dharma (righteousness) at all times.[38] In time of emergency, however, he may become unscrupulous and merciless and dispense harsh but just punishment. In dealing with the enemies of the state, both foreign and domestic, the Mahabharata sanctions the use of stratagems of deception and treachery.[39]

The Code of Manu, probably written between the sixth and second centuries B. C., enjoins the king to preserve dharma (righteousness) even by cruel means if necessary. It extols the virtues of punishment and considers it as the most effective means to maintain order. In the absence of punishment, the law of the jungle would prevail.[40]

The importance of wise counsel for the ruler has been long recognized in India. The religious scriptures of India dating back to antiquity direct the ruler to seek advice from the learned men: "Let him daily worship aged Brahamans who know the Vedas and are pure; for he who always reveres aged men is honored even by the evil spirits."[41] Further, the ruler should select his advisers carefully. He should not consult military officers in deciding to declare the war, but only

on how to conduct the war, and certainly they should not be allowed to head the civil administration of the state.[42]

The ancient Indian scholars probably could not think in terms of any other form of government except monarchy. Therefore they recommended what they considered to be an education befitting a prince. The Code of Manu specifies the following curriculum: "From those versed in the three Vedas, let him (the prince) learn the three-fold sacred science: the primeval science of government, the science of dialectics, and the knowledge of the Supreme Soul; from the people the theory of the various trades and professions."[43]

In the scheme of training for crown princes, Kautilya considers the selection of teachers as of prime importance. The teachers should be well-versed in the theory and practice of the disciplines they teach. The curriculum should include military science, sacred canon, philosophy, economics, and politics. In addition, the prince should learn self-discipline and self-control.[44]

Prasad, an eminent Indian historian, observes that in certain periods of ancient India the curriculum for princely education was quite extensive and detailed. It encompassed a host of activities including the study of Vedas, archery, training of horses, fording a river, performance of sacrifices, chess, art of warfare, art of love, rhetoric, grammar, eloquence, astronomy, and numerous others.[45]

Ancient Greece

The Greek civilization which developed later than the Egyptian,

Babylonian, Chinese, and Indian civilizations exhibits further refinement of the management concepts. The state of Athens had an aristocratic form of government at the dawn of the authentic history which lasted until about the fifth century B. C. During this period, the government was composed of two branches -- the Areopagus and the Archonate -- performing roughly the legislative and executive functions, respectively. Later, when Athens became a democracy, there evolved three branches of government -- the boule, the ecclesia, and the heliaea -- which crudely approximated the executive, the legislative, and the judicial branches of a modern government, respectively. The differentiation in the functions of these branches was not discrete, and there was considerable overlapping. Nonetheless, it portended the beginning of functionalism in management, that is, grouping of similar activities together in an organization.[46]

The ancient Greeks conceived of an ingenious device to improve productivity. They tried to synchronize the operations of a task with the rhythms and tempos of music. They standardized motions and composed music to accompany them. In addition to increasing the productivity, this device had a therapeutic value for the workers engaged in hard, monotonous, repetitive tasks.[47]

Like other ancient people, the Greeks also emphasized specialization and strove to promote it by making the trades hereditary.[48] Plato stressed the same principle when he enunciated that a man whose work was confined to a limited task would excel at it. [49]

The discourse of Socrates (470-300 B. C.) with Nicomachides, a battle-scarred soldier, believed to have been recorded by Xenophon, one of his disciples, reveals his understanding of the principle of universality of management. Socrates viewed management as a phenomenon common to the governance of all types of organizations.[50] Parenthetically, it may be stated that the Greeks went too far in the application of the Socratic notion of universality of management when they started rotating regularly the military and municipal officers. This led to the dire consequences of inefficiency and ineffectiveness in both civil and military functions.

Plato (428-348 B. C.) expounded in his Republic the concept of philosopher-kings. He stated that rulers should possess both political acumen and philosophical wisdom to rule the state and to rescue humanity from evils. In his search for philosopher-kings, he developed an elaborate scheme to train them. He divided the training period into four stages and prescribed four examinations to be given at the age of twenty, thirty, thirty-five, and fifty. The first examination would test competency in basic education, gymnastics, music, and individual sciences. The second examination would assess understanding of the relationships of the various sciences as well as the power of dialectical reasoning. The third examination would evaluate the grasp of philosophy. The fourth examination would comprise secret observations in various job situations for a period of fifteen years to test the strength of character. Only after a person had passed these examinations,

could he be considered fit to be a ruler.[51]

After suffering at the hands of King Dionysius, the tyrant of Syracuse, Plato became less idealistic and more restrained in his pronouncements. Generally speaking, the Greek philosophy recommends a judicious combination of abstract virtues with practical wisdom and advocates moderation on the part of the rulers.[52]

Aristotle (384-322 B. C.), while commenting on different forms of governments, offered stratagems to the ruler on how to stay in power. He advised him to capitalize on the natural jealousy among his officers and cautioned him not to give too much authority to an ambitious person or to demote a person all too soon. According to Aristotle, the ruler should develop the spirit of compromise and follow the principle of golden mean in his actions.[53]

Plato in his Republic organized the whole state into a hierarchy consisting of three social levels. The first level would include philosopher-kings who would represent aristocracy of wisdom and knowledge and who would act as guardians of the state. The second level would comprise warriors who would defend the state against its enemies. Finally, the third level would be composed of artisans who would serve the state by engaging themselves in material pursuits.[54]

Aristotle, on the other hand, elaborated on the division of state functions without mentioning the hierarchy of the organization. He distinguished between the legislative, executive, and judicial functions of the state and identified the major executive functions

of government such as defense, finance, public works, justice, and religion. He discussed the relationship between the size of the organization and the degree of specialization.[55]

Military leaders of ancient Greece have also made significant contributions to management thought. The life of Cyrus, a military leader and a ruler, offers examples of the application of several management concepts. Emphasizing the importance of innovativeness and creativeness in management, Cyrus's father advised him: "... not to adopt such plans only as you have been taught, but to be yourself a contriver of stratagems... ."[56] Further, he impressed upon him the necessity of advance planning when he advised him: "Consider at night what your men shall do when it is day; and consider in the day how matters may be best settled for the night."[57]

Cyrus knew the importance of detailed job description, the significance of specificity and clarity of instructions, the need for employee motivation and morale, and the value of recognition of the subordinates' contributions. Apparently, his grasp of the principles of personnel management was thorough.[58]

Cyrus was an organizing genius. He recognized the importance of order and discipline, standardization of motions, coordination of men and materials, and evaluation of the results. He displayed through his actions his cognizance of the principles of division of work, unity of command, unity of purpose, team-work, and universality of management. He applied these principles in the management of both

his army as well as empire.[59]

The staff principle has been used by the military since the beginning of its organization. The complexity and largeness of the military organization necessitated the evolution of the staff function. Alexander the Great (356-323 B. C.) is reported to have utilized the staff function extensively and his military successes are to a large extent attributed to it.[60] His example undoubtedly influenced leaders like Hannibal, Caesar, Frederick the Great, Napoleon, and others in employing it. The staff function was greatly refined and expanded in the medieval times and came to be recognized as an indispensable element of the army organization.[61] The staff principle may be considered as one of the most significant contributions of the military organization to management thought.

An anonymous treatise on the art of war believed to have been written by some Greek scholar during the sixth century A. D. emphasizes the importance of standardization of procedures in the management of the army. It maintains that standardization of procedures makes the army more efficient and effective.[62]

Xenophon's writings offer an insight into estate management in ancient Greece. For purposes of management, the estate was divided into two parts: outdoor and indoor, with a separate manager for each. The management of the outdoor estate invloved such operations as ploughing, sowing, grazing, harvesting, etcetera; whereas that of the indoor estate encompassed such activities as storage and

preservation of the products. The indoor manager kept an account of all the servants, both working inside as well as outside. He managed the income and expenditure of the whole estate through careful planning and budgeting. Accurate inventory control was maintained, and product-sharing was used to provide incentive to the workers for the improvement of the estate.[63]

Ancient Rome

Ancient Rome provides superb examples of the evolution of the management concepts. In the early period of history when Rome was a city state and a republic, the executive functions of the government were divided into a number of distinct positions with different titles. For example, consul, practor, tribune, quaestor, aedile, curule aedile, and censor were the titles of the various functionaries employed in the service of the republic. This represents a considerable refinement of the concept of functionalism on the part of the early Romans.[64]

Like the Greeks, the Romans of this period could not conceive of the possibility of delegation of authority. They could not imagine that the possessor of authority could be represented by anyone else other than by himself. The consular system with personal command and face-to-face relationship worked reasonably well so long as Rome was a city state. But its inadequacy became increasingly apparent as Rome started expanding its dominion. In response to the exigencies of the extending frontiers of the republic, the evolution of the process of delegation was inevitable.

First, the proconsular system emerged which in essence was an extension of the consular authority and not an act of delegation of authority. Under this system, the consuls (the military magistrates) and the praetors (the civil magistrates), after one year of service, were appointed as proconsuls and propraetors to rule provinces with greater authority of their own and with diminished allegiance to the central government. Thus the Roman Republic with its extended territory gradually developed into a decentralized organization in which the provincial governors wielded enormous power without any effective control from the central government. About the beginning of the Christian era, the increasing independence of the provincial governors eventually led to the destruction of the Republic and the creation of the Roman Empire with military autocracy.

The problem that continuously vexed the early Roman rulers was how to maintain effective control, secure loyalty, and collect taxes in the far-flung territory and at the same time allow a sufficient degree of latitude in the local administration in view of the regional peculiarities. The solution to this problem ultimately emerged through the gradual evolution of the process of delegation of authority. Under Julius Caesar, the provincial governors were totally and directly accountable to him and, unlike the consuls of the Republic, possessed no authority of their own. They had authority delegated to them by the Emperor, exercised it at his pleasure, and could be dispossessed of it by him at his discretion.

Emperor Diocletian (284-305 A. D.) adopted measures that further contributed to the refinement of the process of management. He introduced a new organizational structure with several levels of hierarchy and a graduated delegation of authority. He divided the whole empire into four major geographical regions which encompassed thirteen dioceses which in turn comprised 101 provinces. Governors were appointed in charge of the provinces, vicarii of the dioceses, and praetorian prefects of the regions. The governors were subordinate to the vicarii who were supervised by the praetorian prefects who in turn were responsible to the Emperor. In addition, there were numerous other minor officials under the governors. All these officials including the Emperor formed the chain of command with superordinate-subordinate relationship.[65]

With the implementation of this scheme, the earlier practice of provincial governors directly reporting to the emperor was abandoned, and the imperial authority was greatly strengthened throughout the empire. All parts of the vast empire came under firm and effective control of the central government. Diocletian's scheme of organization discouraged ambitious officials from defying imperial authority and attempting usurpation of power. The application of the principle of delegation of authority allowed a greater degree of latitude in dealing with the local problems without diminishing the accountability of the subordinates.

Another notable contribution to management thought made by

Diocletian was the functional differentiation between the civil and military administration of the empire. The praetorian prefects, vicarii, and provincial governors were civil magistrates with no jurisdiction in the military affairs. In contrast, the magistri militum, duces, and comitum were officers in the hierarchy of the military organization. The civil and military branches of the administration were distinct and separate except at the highest level where the emperor was the head of both.

The evolution and refinement of the management concepts took place in response to the changes in the form of Roman government. The transformation of the Roman city republic into a vast empire necessitated the development of a complex hierarchical governmental organization and the evolution of the process of delegation of authority. The functional differentiation was greatly extended and refined, although from the modern standpoint it was far too crude and simple. For example, the Romans could not distinguish between the executive and judicial functions of the government and the executive officials dispensed justice as well. Finally, the Romans could not have succeeded in governing the vast empire and in making their institutions work without imposing a firm order and discipline and without instituting an effective coordination system.

Two treatises believed to have been written in the ancient period of Rome offer helpful insight into farm management. The one written by Cato (234-149 B. C.) urges the farmer to inspect the farm

periodically to check on the progress of work, to instruct the overseer to complete the work on time, and to ask him to plan the work in such a way that the workers would not stay idle. Cato advises the farmer to maintain accurate records, institute inventory control, and prepare a yearly plan for the overseer. Likewise, Cato's advice to the overseer encompasses the whole range of management activities including planning, staffing, communicating, discipline, human relations, and morale. The other treatise, written by Varro (116-28 B. C.), is equally revealing concerning the selection of farm-workers and foremen, reward system, techniques of discipline, and morale.[66]

CONCLUSION

Man has always used the management process, although unwittingly, ever since he appeared on this planet. Even as an isolated individual, he planned, coordinated, and controlled his own activities. With the emergence of the family as a societal unit, the use of such processes as organizing, staffing, and directing became necessary. The gregarious instinct of man and his instinctual need for self-preservation gradually led to the formation of clans and tribes. Change in the nature of economic activities -- from hunting, fishing, fruit and nut collecting to pastoral and then to agricultural activities -- eventually led to permanent settlements, growth of cities, establishment of empires, and development of increasingly complex social institutions. These societal changes were accompanied by commensurate gradual refinement in the management techniques.

Although the practice of management is as old as man himself, the early period of human history offers virtually no evidence of a deliberate attempt toward developing a theory of management. The ancient people, confronted with the task of managing their affairs in the continually changing times, developed the needed management techniques through the slow process of trial and error. Nonetheless, in the writings of the ancient scholars and in the utterances of the ancient rulers, one discerns certain references which may be construed to be the seedlings of the management thought. A remarkable characteristic of the management concepts is their striking similarity despite the fact that they were indigenously developed in diverse and distant societies and at different times. This suggests that management is a universal phenomenon possessing common elements to the extent that the basic ingredients of human behavior are similar in the different societies. However, it may vary in its application according to the nature of the activities of an organization or the degree of sophistication of the developmental stage of a society.

FOOTNOTES

[1]James Mellart, Earliest Civilizations of the Near East (London: Thames and Hudson, 1965), p. 11.

[2]V. G. Childe, Man Makes Himself (New York: The New American Library, 1951), pp. 143-145.
Will Durant, The Story of Civilization, Part 1, Our Oriental Heritage (New York: Simon and Schuster, 1954), p. 131.

[3]Adolf Erman, Life in Ancient Egypt, translated from the German by Helen M. Tirard (London: Macmillan and Company, Ltd., 1894), pp. 472-475.

[4]J. H. Breasted, Ancient Records of Egypt (Chicago: University of Chicago Press, 1906), pp. 157, 231-245.

[5]Adolf Erman, op. cit., p. 102.

[6]Ibid., pp. 112-113.

[7]Gardner Wilkinson, Manners and Customs of Ancient Egyptians, second edition (London: John Murray Publishers, Ltd., 1842), p. 8.

[8]Adolf Erman, The Literature of the Ancient Egyptians, translated from the German by Aylward M. Blackman (New York: E. P. Dutton and Company, Inc., 1927), pp. 55-60.

[9]John A. Wilson, The Culture of Ancient Egypt (Chicago: University of Chicago Press, 1951), p. 84.

[10]Adolf Erman, The Literature of the Ancient Egyptians, op. cit., pp. 59, 76, 195, 242.

[11]J. H. Breasted, op. cit., pp. 269, 274, 277-278, 291.

[12]Robert F. Harper, The Code of Hammurabi, King of Babylon (Chicago: University of Chicago Press, 1904), pp. 37, 157.

[13]E. A. Wallis Budge, Babylonian Life and History, second edition (London: Religious Tract Society, 1925), pp. 126, 128, 130, 218.
Robert F. Harper, op. cit., pp. 89, 93, 104-105, 122.

[14]Georges Contenau, Everyday Life in Babylon and Assyria (London: Edward Arnold, Ltd., 1954), p. 86.

[15]L. P. Alford, Laws of Management (New York: The Ronald Press Company, 1928), p. 37.
Will Durant, op. cit., p. 225.

[16]James D. Mooney, The Principles of Organization, revised edition (New York: Harper and Row, 1947), pp. 20-21.

[17]Ibid.

[18]Bertram M. Gross, The Managing of Organizations, Vol. 1, (London: Collier-Macmillan, Ltd., 1964), p. 93.

[19]Ibid., p. 100.

[20]Ibid., p. 104.

[21]Daniel A. Wren, The Evolution of Management Thought (New York: The Ronald Press Company, 1972), p. 15.

[22]James Legge, The Chinese Classics (translated from the Chinese) (Hong Kong: Hong Kong University Press, 1960), pp. 26, 180-181.

[23]Ibid., p. 57.

[24]Kuo-Cheng Wu, Ancient Chinese Political Theories (Shanghai: The Commercial Press, Ltd., 1928), pp. 40-41.

[25]Thomas P. Phillips, Roots of Strategy (Harrisburg: Military Service Publishing Company, 1955), pp. 23, 26, 29, 40, 73, 75.

[26]Chen Huan-Chang, The Economic Principles of Confucius and His School (New York: Columbia University Press, 1911), pp. 59, 408-409.

[27]Ling Yutang, The Wisdom of Confucius (New York: Modern Library, 1943, pp. 11-24, 122, 199.

[28]Kuo-Cheng Wu, op. cit., p. 226.

[29]Ling Yutang, The Wisdom of Lao Tse (New York: Random House, 1948), pp. 56, 114.

[30]Lin Mousheng, Men and Ideas (New York: John Day, 1942), p. 110.

[31]Liu Shao, The Study of Human Abilities, translated by J. K. Shyrock, American Oriental Series, Vol. 2 (New Haven: American Oriental Society, 1937), pp. 77, 151.

[32]Albert Lepawsky, Administration: The Art and Science of Organization and Management (New York: Alfred A. Knopf, Inc., 1949), p. 428.

[33]Max Weber, The Religion of China, translated by Hans H. Gerth (New York: Free Press, 1961), p. 121.

[34]Hu Shih, "Confucianism," Encyclopaedia of the Social Sciences (1931), IV, 198-200.

[35]R. Shamasastry, Kautilya's Arthasastra, sixth edition (Mysore: Mysore Printing and Publishing House, 1960), pp. 14, 104.

[36]D. Mackenzie Brown, The White Umbrella (Berkeley: University of California Press, 1958), pp. 49-63.

[37]Ibid.

[38]Heinrich Zimmer, Philosophies of India, edited by Joseph Campbell (New York: Pantheon Books, Inc., 1951), pp. 87-139.

[39]Bertram M. Gross, op. cit., pp. 100-102.

[40]D. Mackenzie Brown, op. cit., pp. 26-39.

[41]Ibid., p. 30.

[42]Beni Prasad, Theory of Government in Ancient India (Allahabad: Indian Press, 1928), pp. 235-236.

[43]D. Mackenzie Brown, op. cit., p. 30.

[44]U. N. Ghoshal, A History of Indian Political Ideas (London: Oxford University Press, 1959), p. 121.

[45]Beni Prasad, op. cit., p. 218.

[46]James D. Mooney, op. cit., pp. 58-62.

[47]Gustave Glotz, Ancient Greece at Work (New York: Alfred A. Knopf, Inc., 1926), pp. 272-275.

[48]Jules Toutain, The Economic Life of the Ancient World (New York: Alfred A. Knopf, Inc., 1930), pp. 133-134.

[49]Francis Cornford, The Republic of Plato (New York: Oxford University Press, 1959), pp. 165-167.

[50]Xenophon, Memorabilia and Oeconomicus, translated by E. C. Marchant (Cambridge: Harvard University Press, 1923), pp. 183-189. Daniel A. Wren, op. cit., pp. 16-17.

[51]Francis Cornford, op. cit., Books V, VII.

[52]Bertram M. Gross, op. cit., pp. 93-100.

[53]Ibid., pp. 100-101.

[54]Francis Cornford, op. cit., Books V, VII.

[55]Bertram M. Gross, op. cit., pp. 114-115.

[56]Claude S. George, Jr., The History of Management Thought, second edition (Englewood Cliffs, N. J.: Prantice Hall, 1972), pp. 20-21.

[57]Ibid.

[58]Ibid.

[59]Ibid.

[60]W. W. Tarn, Alexander The Great (Boston: Beacon Press, 1957), p. 12.

[61]J. D. Hittle, The Military Staff (Harrisburg: Military Service Publishing Company, 1949), p. 36.

[62]O. Spaulding, Pen and Sword in Greece and Rome (Princeton, N. J.: Princeton University Press, 1937), pp. 102-103.

[63]Claude S. George, Jr., op. cit., p. 23.

[64]James D. Mooney, op. cit., pp. 63-72.

[65]Ibid.

[66]Claude S. George, Jr., op. cit., pp. 24-26.

BIBLIOGRAPHY

Alford, L. P. Laws of Management. New York: The Ronald Press Company, 1928.

Breasted, J. H. Ancient Records of Egypt. Chicago: University of Chicago Press, 1906.

Brown, Mackenzie D. The White Umbrella. Berkeley: University of California Press, 1958.

Budge, E. A. Wallis. Babylonian Life and History, second edition. London: Religious Tract Society, 1925.

Childe, V. G. Man Makes Himself. New York: The New American Library, 1951.

Contenau, Georges. Everyday Life in Babylon and Assyria. London: Edward Arnold, Ltd., 1954.

Cornford, Francis. The Republic of Plato. New York: Oxford University Press, 1959.

Durant, Will. The Story of Civilization, Part 1, Our Oriental Heritage. New York: Simon and Schuster, 1954.

Erman, Adolf. Life in Ancient Egypt, (translated from the German by Helen M. Tirard). London: Macmillan and Company, Ltd., 1894.

Erman, Adolf. The Literature of the Ancient Egyptians, (translated from the German by Aylward M. Blackman). New York: E. P. Dutton and Company, Inc., 1927.

George, Jr., Claude S. The History of Management Thought, second edition. Englewood Cliffs, N. J.: Prentice Hall, 1972.

Ghoshal, U. N. A History of Indian Political Ideas. London: Oxford University Press, 1959.

Glotz, Gustave. Ancient Greece at Work. New York: Alfred A. Knopf, Inc., 1926.

Gross, Bertram M. The Managing of Organizations, Vol. 1. London: Collier-Macmillan, Ltd., 1964.

Harper, Robert F. The Code of Hammurabi, King of Babylon. Chicago: University of Chicago Press, 1904.

Hittle, J. D. The Military Staff. Harrisburg: Military Service Publishing Company, 1949.

Huan-Chang, Chen. The Economic Principles of Confucius and His School. New York: Columbia University Press, 1911.

Legge, James. The Chinese Classics, (translated from the Chinese). Hong Kong: Hong Kong University Press, 1960.

Lepawsky, Albert. Administration: The Art and Science of Organization and Management. New York: Alfred A. Knopf, Inc., 1949.

Mellaart, James. Earliest Civilizations of the Near East. London: Thames and Hudson, 1965.

Mooney, James D. The Principles of Organization, revised edition. New York: Harper and Row, 1947.

Mousheng, Lin. Men and Ideas. New York: John Day, 1942.

Phillips, Thomas P. Roots of Strategy. Harrisburg: Military Service Publishing Company, 1955.

Prasad, Beni. Theory of Government in Ancient India. Allahabad: Indian Press, 1928.

Shamasastry, R. Kautilya's Arthasastra, sixth edition. Mysore: Mysore Printing and Publishing House, 1960.

Shao, Liu. The Study of Human Abilities, translated from the Chinese by J. K. Shyrock, American Oriental Series, Vol. 2. New Haven: American Oriental Society, 1937.

Shih, Hu. "Confucianism," Encyclopaedia of the Social Sciences, 1931, IV, 198-200.

Spaulding, O. Pen and Sword in Greece and Rome. Princeton, N. J.: Princeton University Press, 1937.

Tarn, W. W. Alexander The Great. Boston: Beacon Press, 1957.

Toutain, Jules. The Economic Life of the Ancient World. New York: Alfred A. Knopf, Inc., 1930.

Weber, Max. The Religion of China, (translated from the German by Hans H. Gerth). New York: Free Press, 1961.

Wilson, John A. The Culture of Ancient Egypt. Chicago: University of Chicago Press, 1951.

Wilkinson, Gardner. Manners and Customs of Ancient Egyptians, second edition. London: John Murray Publishers, Ltd., 1842.

Wren, Daniel A. The Evolution of Management Thought. New York: The Ronald Press Company, 1972.

Wu, Kuo-Cheng. Ancient Chinese Political Theories. Shanghai: The Commercial Press, Ltd., 1928.

Xenophon. Memorabilia and Oeconomicus, (translated from the Greek by E. C. Marchant). Cambridge: Harvard University Press, 1923.

Yutang, Ling. The Wisdom of Confucius. New York: Modern Library, 1943.

Yutang, Ling. The Wisdom of Lao Tse. New York: Random House, 1948.

Zimmer, Heinrich. Philosophies of India, (edited by Joseph Campbell). New York: Pantheon Books, Inc., 1951.